



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/579,257

04/19/2007

Hubert Schedler

12400-073

6260

757 7590 12/15/2008
BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, IL 60610

EXAMINER

ENGLISH, JAMES A

ART UNIT

PAPER NUMBER

3616

MAIL DATE

DELIVERY MODE

12/15/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/579,257	Applicant(s) SCHEDLER, HUBERT	
	Examiner James English	Art Unit 3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 May 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>07/12/2006 and 05/11/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: **15, 17**. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: **27**. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

Art Unit: 3616

Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities: In paragraph 6, the first sentence is incomplete.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 3, 5-10, and 12-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Spencer et al. (US 5,647,609).

With respect to claims 1, 3 and 10, Spencer et al. discloses a side airbag module (40) that has a cushion (50) with forward and rearward faces (48, 49) which may be made of separate panels sewn to the central cushion fabric (51). (Column 4, lines 26-29.) Spencer et al. further discloses a tether (70) with a first end (71) secured to the outboard contact face (47) of the cushion (50) and a second end (72) connected to the inboard contact face (46) of the cushion (50). (Fig. 5, column 6, lines 5-10.) This is

Art Unit: 3616

analogous to an airbag formed of interconnected layers (48, 49, 51) comprising an internal tether (70) having two ends (71, 72) to interconnect two spaced apart regions of the interior of the airbag (46, 47), wherein the distance around the periphery of the airbag, in horizontal section, between the ends of the tether (70) is greater in one direction than in the other direction and the length of the tether is less than the distance in the other direction (Fig. 5). Spencer et al. further discloses the airbag module (40) having a housing (60), inflator (42) and cushion (50). (Fig. 3, column 3, lines 62-64.) This is analogous to the airbag (50) including a portion to receive a gas generator (42) arranged to inflate two spaced-apart regions extending therefrom (Fig. 4), with the tether (70) extending from a point adjacent the portion configured to receive the gas generator (42) to a point within the interior of the airbag remote from the gas generator (42). (Modified Fig. 2 - below.)

With respect to claim 5, Spencer et al. discloses the cushion (50) includes forward and rearward faces (48, 49) which may be made of separate panels sewn to the central cushion portion (51). (Column 26-29.) Spencer et al. further discloses the airbag module (40) having a housing (60), inflator (42) and cushion (50). (Fig. 3, column 3, lines 62-64.) This is analogous to the airbag (50) is formed from two superimposed substantially identical layers of fabric (48, 49) interconnected by a peripheral seam, the internal tether (70) extending from part of the peripheral seam to a point adjacent the portion configured to receive the gas generator (42). (Modified Fig. 2 - below.)

Art Unit: 3616

With respect to claim 6, Spencer et al. further discloses an indented pocket portion (58) being formed by pleating the inboard contact face (46) inwardly and sewing the second end (72) of the tether (70). (Fig. 5, column 6, lines 11-13.) This is analogous to the airbag formed from two-superimposed substantially identical layers of fabric (48, 49) interconnected by a peripheral seam, there being a gusset ("indented pocket portion" – 58) interposed between the two layers of fabric (48, 49) over at least part of the peripheral seam, the tether (70) extending from the portion configured to receive the gas generator (42) to a side edge of the gusset (58).

With respect to claim 7, Spencer et al. discloses the cushion (50) having upper and lower portions (52, 54) formed from the same sheet or sheets of fabric and are in fluid communication with each other. (Fig. 2, column 4, lines 42-45.) This is analogous to the airbag (50) formed from two adjacent layers of fabric of different sizes (52, 54) interconnected by a peripheral seam (formed from sheets of fabric in fluid communication), the internal tether (70) extending from the portion configured to receive the gas generator (42) to part of the peripheral seam. (Figs. 2 and 4-5.)

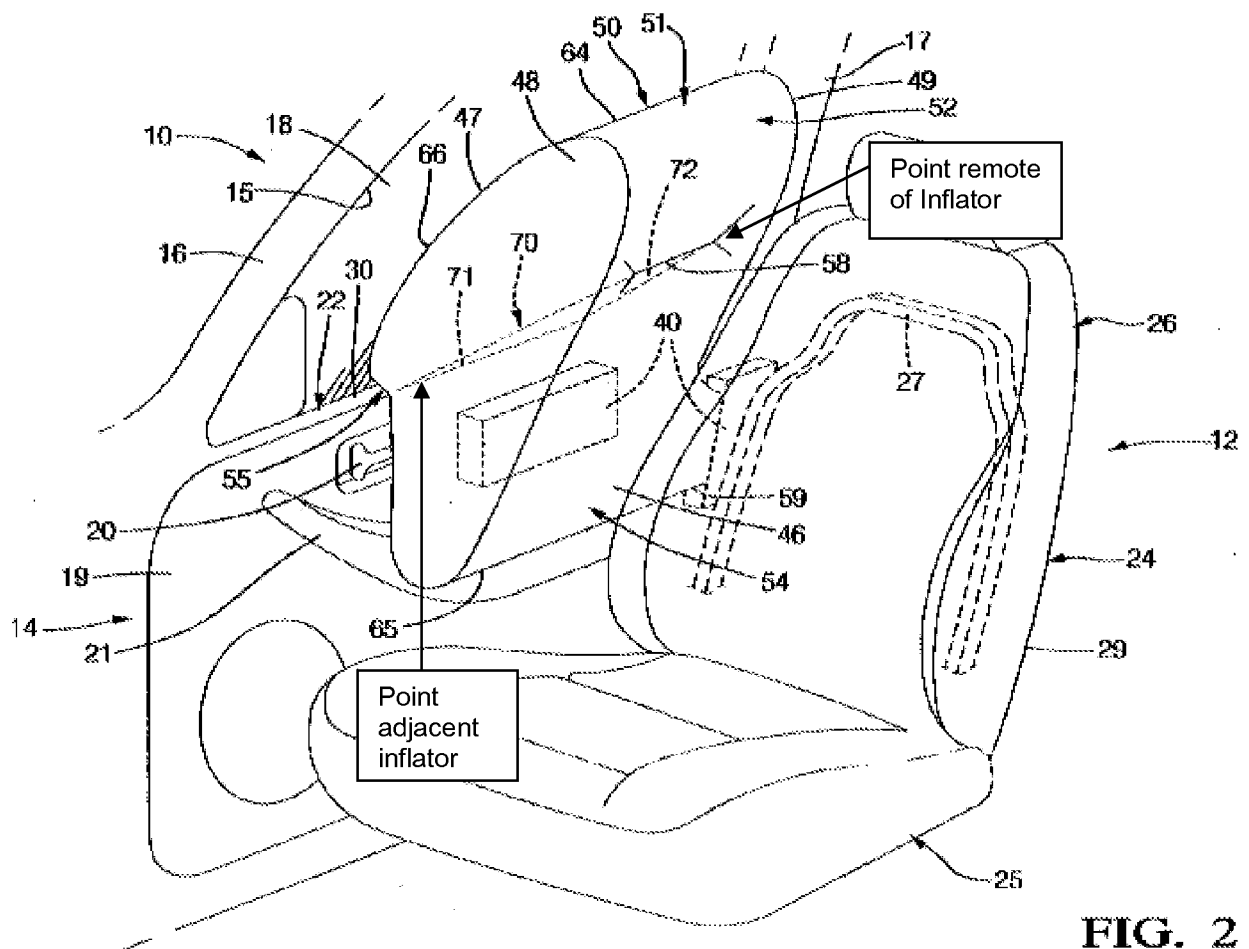


FIG. 2

With respect to claims 8-9 and 12-13, Spencer et al. discloses using one or more tethers (70). (Column 8, lines 4-6.) This is analogous to the tether (70) being a single panel or a plurality of straps acting together.

6. Claims 1, 3-4 and 8-10 and 12-13, are rejected under 35 U.S.C. 102(b) as being anticipated by Heinz et al. (US 6,073,959).

With respect to claims 1, 3-4 and 10, Heinz et al. teaches of two fabric layers (12,13) of approximately the same size, one on top of the other, connected by two circumferential seams (14), where the restraint (15) is connected at the external fabric layer (13) and the other (16) facing the generator (21) to fabric layer (12.) (Fig. 3,

Art Unit: 3616

column 2, lines 59-62, column 3, lines 24-26 and column 4, lines 6-9.) Heinz et al. further discloses an installation opening (24) for the gas generator (4). (Fig. 6, column 3, line 35.) This is analogous to an airbag formed of interconnected layers (12, 13) comprising an internal tether ("restraint" - 15) having two ends (16, 17) to interconnect two spaced-regions of an interior of the airbag (Figs. 3-4), wherein the distance around the periphery of the airbag, in horizontal section, between the ends of the tether (15) is greater in one direction than in the other direction and the length of the tether is less than the distance in the other direction (Fig. 4). This is analogous to the airbag (1) including a portion (24) to receive a gas generator (4) arranged to inflate two spaced-apart regions extending therefrom (Fig. 4), with the tether (15) extending from a point adjacent the portion (24) configured to receive the gas generator (4) to a point within the interior of the airbag remote from the gas generator (4). (Figs. 3, 4, 6.) This is further analogous to an airbag (5) formed from two super-imposed substantially identical layers of fabric (12, 13), the layers of fabric being interconnected by a peripheral seam (14), the tether (15) extending from the portion configured to receive the gas generator (21) to a part of one of the layers (13) spaced from the peripheral seam (14).

With respect to claims 8-9 and 12-13, Heinz et al. discloses at least one restraint (15) provided to control the shape of the airbag (5). (Fig. 3, column 2, lines 63-65.) This is analogous to the tether being a single panel or a plurality of straps acting together.

7. Claims 1 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Oe et al. (US 5,676,395).

Art Unit: 3616

With respect to claims 1 and 10, Oe et al. discloses an airbag (24) having a strap (42) with the length set to be shorter than the diameter of the airbag (24) in the expanded state. (Fig. 1, column 6, lines 41-46.) Oe et al. further discloses one end (42A) of the strap (42) sewn in the vicinity of the ring plate (38) and the other end (42B) of the strap (42) attached to a position displaced to the upper side. (Fig. 1, column 6, lines 48-52.) Oe et al. further discloses the airbag invention is applicable to side airbag applications. (Column 7, line 67 and column 8, lines 1-2.) This is analogous to an airbag (24) formed of interconnected layers comprising an internal tether (42) having to ends (42A, 42B) to interconnect two spaced-apart regions (X, Y) of an interior of the airbag, wherein the distance around the periphery of the airbag, in horizontal section, between the ends of the tether (42) is greater in one direction than in the other direction and the length of the tether is less than the distance in the other direction (Fig. 1). This is further analogous to the airbag (24) including a portion to receive a gas generator (22), with the tether (42) extending from a point adjacent the portion (24) configured to receive the gas generator (22) to a point within the interior of the airbag remote from the gas generator (22). (Figs. 1-2.)

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3616

9. Claims 2, 11, 14 and 16-20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Spencer et al. (US 5,647,609).

With respect to claims 2, 11 and 14, Spencer et al. discloses the claimed invention except for explicitly disclosing that the tether (70) has a vertical extent of at least 50mm. However, Spencer et al. does disclose that the second end (72) of the tether (70) is located vertically higher than the first end (71) of the tether (70) and the overall vertical extent appears to be at least 50mm. (Fig. 5, column 6, lines 13-15.) Alternatively, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the vertical extent of the tether to be at least 50mm, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

With respect to claims 16, Spencer et al. discloses the cushion (50) includes forward and rearward faces (48, 49) which may be made of separate panels sewn to the central cushion portion (51). (Column 26-29.) Spencer et al. further discloses the airbag module (40) having a housing (60), inflator (42) and cushion (50). (Fig. 3, column 3, lines 62-64.) This is analogous to the airbag (50) is formed from two super-imposed substantially identical layers of fabric (48, 49) interconnected by a peripheral seam, the internal tether (70) extending from part of the peripheral seam to a point adjacent the portion configured to receive the gas generator (42). (Modified Fig. 2 - below.)

Art Unit: 3616

With respect to claim 17, Spencer et al. further discloses an indented pocket portion (58) being formed by pleating the inboard contact face (46) inwardly and sewing the second end (72) of the tether (70). (Fig. 5, column 6, lines 11-13.) This is analogous to the airbag is formed from two-superimposed substantially identical layers of fabric (48, 49) interconnected by a peripheral seam, there being a gusset ("indented pocket portion" – 58) interposed between the two layers of fabric (48, 49) over at least part of the peripheral seam, the tether (70) extending from the portion configured to receive the gas generator (42) to a side edge of the gusset (58).

With respect to claim 18, Spencer et al. discloses the cushion (50) having upper and lower portions (52, 54) formed from the same sheet or sheets of fabric and are in fluid communication with each other. (Fig. 2, column 4, lines 42-45.) This is analogous to the airbag (50) formed from two adjacent layers of fabric of different sizes (52, 54) interconnected by a peripheral seam (formed from sheets of fabric in fluid communication), the internal tether (70) extending from the portion configured to receive the gas generator (42) to part of the peripheral seam. (Figs. 2 and 4.)

With respect to claims 19-20, Spencer et al. discloses using one or more tethers (70). (Column 8, lines 4-6.) This is analogous to the tether (70) being a single panel or a plurality of straps acting together.

10. Claims 2, 11, 14 and 19-20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Heinz et al. (US 6,073,959).

Art Unit: 3616

With respect to claims 2, 11 and 14, Heinz et al. discloses the claimed invention except for the tether (15) having a vertical extent of at least 50mm. However, Heinz et al. does disclose that the second end (17) of the tether (15) is located vertically higher than the first end (16) of the tether (15) and the overall vertical extent appears to be at least 50mm. (Figs. 3-4.) Alternatively, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the vertical extent of the tether to be at least 50mm, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

With respect to claims 19-20, Heinz et al. discloses at least one restraint (15) provided that controls the shape of the airbag (5). (Fig. 3, column 2, lines 63-65.) This is analogous to the tether being a single panel or a plurality of straps acting together.

11. Claims 4 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spencer et al. (US 5,647,609) in view of Heinz et al. (US Patent No. 6,073,959).

With respect to claims 4 and 15, Spencer et al. does not disclose the tether extending to a part of a superimposed layer spaced apart from the peripheral seam. Heinz et al. teaches of two fabric layers (12,13) of approximately the same size, one on top of the other, connected by two circumferential seams (14), where the restraint (15) is connected at the external fabric layer (13) and the other end in the vicinity of the end (16) facing the generator (21) to fabric layer (12.) (Fig. 3, column 2, lines 59-62, column 3, lines 24-26 and column 4, lines 6-9.) This is analogous to an airbag (5) formed from two super-imposed substantially identical layers of fabric (12, 13), the layers of fabric

Art Unit: 3616

being interconnected by a peripheral seam (14), the tether ("restraint" - 15) extending from the portion configured to receive the gas generator (21) to a part of one of the layers (13) spaced from the peripheral seam (14). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Spencer et al. to have the tether extend to a part of a superimposed layer spaced apart from the peripheral seam, as taught by Heinz et al., in order to control the shape of the airbag during inflation. (Column 2, lines 63-65.)

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The reference Jang et al. (6,364,348 B1) discloses a side airbag system having an upper chamber and a lower chamber partitioned by a tether.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James English whose telephone number is (571)270-7014. The examiner can normally be reached on Monday - Thursday, 7:00 - 5:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Q. Nguyen can be reached on (571)272-6952. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John Q. Nguyen/
Supervisory Patent Examiner, Art Unit 3616

/James English/
Examiner, Art Unit 3616